

Amendments to the Claims

This listing of the claims replaces all prior versions and listing of the claims in the present application.

Listing of Claims

1. (currently amended) An information record medium on which there are recorded in a non-transitory state:

an object data file for storing a object data which includes a video stream having a main-video and a sub-picture stream having a sub-picture;

a play list information file for storing play list information which includes a plurality of item information each of which indicates a reproduction unit of the object data; and

an object information file for storing object information which indicates an address of the object data which is indicated by each of the plurality item information, wherein

the sub-picture stream includes sub-picture information, which indicates the sub-picture displayable at least partially over the main-video, and sub-picture control information,

the sub-picture control information includes (i) sub-frame control information to control displaying sub-frame which forms one portion of the sub-picture, (ii) identification information to indicate the sub-picture information which is a control target by the sub-frame control information, (iii) sub-frame display position information to indicate a display position of the sub-frame, (iv) cut out range information to indicate a range of the

sub-picture which forms the sub-frame by cutting-out one portion of the sub-picture, (v) button number information to indicate the number of button which is formed by the sub-frame, (vi) button display state information to indicate an initial button display state of the button, and (vii) command information to indicate a command which is to be performed in accordance with the button, wherein

the sub-frame control information includes dynamic control information to dynamically change a display aspect of ~~dynamically~~ the sub-frame.

2. (original) The information record medium according to claim 1, wherein the dynamic control information includes information to change dynamically at least one of a display position, a display size and a display shape of the sub-frame to be displayed over the main-video.

3. (original) The information record medium according to claim 1, wherein the dynamic control information includes information to change dynamically a display content within the sub-frame whose display position, display size and display shape are fixed relative to the main-video.

4. (previously presented) The information record medium according to claim 1, wherein

the sub-frame display position information designates a rectangular area as the sub-frame, the rectangular area occupying a part of the sub-picture, and

the dynamic control information has information to change dynamically the display content within the sub-frame by changing the rectangular area designated by the sub-frame display position information relative to the sub-picture.

5. (currently amended) The information record medium according to claim 1, wherein the dynamic control information has information to dynamically change the display aspect of ~~dynamically~~ the sub-frame in such a manner that the sub-frame moves two-dimensionally or three-dimensionally relative to the main-video.

6. (canceled)

7. (currently amended) An information record apparatus, which is for recording information into an information record medium in a non-transitory state, comprising:

a first record device for recording an object data file for storing a object data which includes a video stream a main-video and a sub-picture stream having a sub-picture, a play list information file for storing play list information which includes a plurality of item information each of which indicates a reproduction unit of the object data, and

an object information file for storing object information which indicates an address of the object data which is indicated by each of the plurality item information, wherein

the first record device records the sub-picture stream in such a manner that the sub-picture stream includes sub-picture

information, which indicates the sub-picture displayable at least partially over the main-video, and sub-picture control information,

the first record device records the sub-picture control information in such a manner that the sub-picture control information includes (i) sub-frame control information to control displaying sub-frame which forms one portion of the sub-picture, (ii) identification information to indicate the sub-picture information which is a control target by the sub-frame control information, (iii) sub-frame display position information to indicate a display position of the sub-frame, (iv) cut out range information to indicate a range of the sub-picture which forms the sub-frame by cutting-out one portion of the sub-picture, (v) button number information to indicate the number of button which is formed by the sub-frame, (vi) button display state information to indicate an initial button display state of the button, and (vii) command information to indicate a command which is to be performed in accordance with the button, wherein

the first record device records the sub-frame control information in such a manner that the sub-frame control information includes dynamic control information to dynamically change a display aspect of ~~dynamically~~ the sub-frame.

8. (currently amended) An information record method, which is performed by an information record apparatus for recording

information into an information record medium in a non-transitory state, comprising:

a first record process, performed by the information record apparatus, of recording an object data file for storing a object data which includes a video stream having a main-video and a sub-picture stream having a sub-picture, a play list information file for storing play list information which includes a plurality of item information each of which indicates a reproduction unit of the object data, and

an object information file for storing object information which indicates an address of the object data which is indicated by each of the plurality item information, wherein

the first record process is for recording the sub-picture stream in such a manner that the sub-picture stream includes sub-picture information, which indicates the sub- picture displayable at least partially over the main-video, and sub- picture control information,

the first record process is for recording the sub-picture control information in such a manner that the sub-picture control information includes (i) sub-frame control information to control displaying sub-frame which forms one portion of the sub-picture, (ii) identification information to indicate the sub-picture information which is a control target by the sub-frame control information, (iii) sub-frame display position information to indicate a display position of the sub-frame, (iv) cut out range

information to indicate a range of the sub-picture which forms the sub-frame by cutting-out one portion of the sub-picture, (v) button number information to indicate the number of button which is formed by the sub-frame, (vi) button display state information to indicate an initial button display state of the button, and (vii) command information to indicate a command which is to be performed in accordance with the button, wherein

the first record process is for recording the sub-frame control information in such a manner that the sub-frame control information includes dynamic control information to dynamically change a display aspect of ~~dynamically~~ the sub-frame.

9. (previously presented) An information reproduction apparatus for reproducing information from the information record medium according to claim 1, said information reproduction apparatus comprising:

a reading device for reading the object data file, the play list information file and the object information file from the information record medium; and

a reproduction device for reproducing the main-video and the sub-picture.

10. (currently amended) An information reproduction method performed by an information reproduction apparatus for ~~[[of]]~~ reproducing information from the information record medium according to claim 1, said information reproduction method comprising:

a reading process, performed by the information reproduction apparatus, of reading the object data file, the play list information file and the object information file from the information record medium; and

a reproduction process, performed by the information reproduction apparatus, of reproducing the main-video and the sub-picture.

11. (currently amended) An information record reproduction apparatus, which is for recording information into an information record medium in a non-transitory state and for reproducing the information from the information record medium, comprising:

a first record device for recording an object data file for storing a object data which includes a video stream having a main-video and a sub-picture stream having a sub-picture, a play list information file for storing play list information which includes a plurality of item information each of which indicates a reproduction unit of the object data, and

an object information file for storing object information which indicates an address of the object data which is indicated by each of the plurality item information, wherein

the first record device records the sub-picture stream in such a manner that the sub-picture stream includes sub-picture information, which indicates the sub-picture displayable at least partially over the main-video, and sub-picture control information,

the first record device records the sub-picture control information in such a manner that the sub-picture control information includes (i) sub-frame control information to control displaying sub-frame which forms one portion of the sub-picture, (ii) identification information to indicate the sub-picture information which is a control target by the sub-frame control information, (iii) sub-frame display position information to indicate a display position of the sub-frame, (iv) cut out range information to indicate a range of the sub-picture which forms the sub-frame by cutting-out one portion of the sub-picture, (v) button number information to indicate the number of button which is formed by the sub-frame, (vi) button display state information to indicate an initial button display state of the button, and (vii) command information to indicate a command which is to be performed in accordance with the button, wherein

the first record device records the sub-frame control information in such a manner that the sub-frame control information includes dynamic control information to dynamically control a display aspect of ~~dynamically~~ the sub-frame, and

said information record reproduction apparatus further comprising:

a reading device for reading the object data file, the play list information file and the object information file from the information record medium; and

a reproduction device for reproducing the main-video and the sub-picture.

12. (currently amended) An information record reproduction method, performed by an information record reproduction apparatus, which is for recording information into an information record medium in a non-transitory state and for reproducing the information from the information record medium, comprising:

a first record process, performed by the information record reproduction apparatus, of recording an object data file for storing a object data which includes a video stream having a main-video and a sub-picture stream having a sub-picture, a play list information file for storing play list information which includes a plurality of item information each of which indicates a reproduction unit of the object data, and

an object information file for storing object information which indicates an address of the object data which is indicated by each of the plurality item information, wherein

the first record process is for recording the sub-picture stream in such a manner that the sub-picture stream includes sub-picture information, which indicates the sub-picture displayable at least partially over the main-video, and sub-picture control information,

the first record process is for recording the sub-picture control information in such a manner that the sub-picture control information includes (i) sub-frame control information to control

displaying sub-frame which forms one portion of the sub-picture, (ii) identification information to indicate the sub-picture information which is a control target by the sub-frame control information, (iii) sub-frame display position information to indicate a display position of the sub-frame, (iv) cut out range information to indicate a range of the sub-picture which forms the sub-frame by cutting-out one portion of the sub-picture, (v) button number information to indicate the number of button which is formed by the sub-frame, (vi) button display state information to indicate an initial button display state of the button, and (vii) command information to indicate a command which is to be performed in accordance with the button, wherein

the first record process is for recording the sub-frame control information in such a manner that the sub-frame control information includes dynamic control information to dynamically control a display aspect of ~~dynamically~~ the sub-frame, and

said information record reproduction method further comprising:

a reading process, performed by the information record reproduction apparatus, of reading the object data file, the play list information file and the object information file from the information record medium; and

a reproduction process, performed by the information record reproduction apparatus, of reproducing the main-video and the sub-picture.

13. (previously presented) A computer-readable recording medium recording thereon, in a non-transitory state, a computer program product for a record control to control a computer disposed at the information record apparatus according to claim 7, said computer program product making the computer function as at least a part of the first record device.

14. (previously presented) A computer-readable recording medium recording thereon, in a non-transitory state, computer program product for a reproduction control to control a computer disposed at the information reproduction apparatus according to claim 9, said computer program product making the computer function as at least a part of the reading device and the reproduction device.

15. (previously presented) A computer-readable recording medium recording thereon, in a non-transitory state, computer program product for a record reproduction control to control a computer disposed at the information record reproduction apparatus according to claim 11, said computer program product making the computer function as at least a part of the first record device, the reading device and the reproduction device.

16. (canceled)